

NOVEMBER/DECEMBER 2024

**23UEMB32 — CLINICAL LABORATORY  
TECHNOLOGY (ELECTIVE III)**

Time : Three hours

Maximum : 75 marks

**SECTION A — (10 × 2 = 20 marks)**

Answer ALL questions.

1. What does PPE stands for?
2. List two hygiene practices essential in a clinical laboratory.
3. Name two methods used to collect blood specimens.
4. Define amniotic fluid.
5. Name two types of fixatives used in tissue processing.
6. What is histochemical staining?
7. Define fibrinogen.
8. What are coagulation disorders?
9. What does ISO stand for?
10. What does COLA stand for?





SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Explain the basic laboratory principles to ensure accuracy in clinical diagnostics.

Or

- (b) Discuss the safety measures that must be taken in a clinical laboratory.

12. (a) Explain the separation of serum and plasma from blood.

Or

- (b) Describe the proper procedure for collecting blood specimens.

13. (a) List out the classification and properties of tissue fixatives used in histopathology.

Or

- (b) Outline the steps involved in paraffin block making and section cutting in histopathological tissue processing.

14. (a) Outline the routine laboratory methods used to investigate coagulation disorders.

Or

- (b) Explain the process for estimating fibrinogen levels in a clinical laboratory.

15. (a) List out the importance of quality assessment in the pre-analytical phase of laboratory testing.

Or

- (b) Discuss the significance of implementing quality control measures in the post-analytical phase of testing.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Discuss the code of conduct for medical laboratories and its importance.
17. Explain about collection and processing of urine specimens.
18. Elaborate on the various methods used to examine tissues and cells in histopathology.
19. Outline the steps involved in the laboratory diagnosis of bleeding disorders.
20. Explain the role of accreditation bodies in maintaining quality standards in health laboratories.

